



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 579,294	05.25.2000	Kenichi Sugiyama	13700-0238	7224

7590 06.27.2003

KILPATRICK STOCKTON LLP
ATTEN: ROGER T. FROST
1100 PEACHTREE STREET SUITE 2800
ATLANTA, GA 30309-4530

EXAMINER

PEREZ, GUILLERMO

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 06.27.2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/579,294

Applicant(s)

SUGIYAMA, KENICHI

Examiner

Guillermo Perez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
- 4a) Of the above claim(s) 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0303.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

This application contains claim 4 drawn to an invention nonelected with traverse in Paper No. 3. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3, and 5 are rejected under 35 U.S.C. 102(b) as anticipated by
or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sugiyama
(JP 410004653A).

Sugiyama discloses a plane carbon commutator comprising:

a plurality of metal segments (15) fixed to a commutator body (3) made of resin
(see abstract), and

engaging projections (17p) provided on a carbon (17) which was previously burnt at a high temperature (*column 3, paragraph 5 according to a translation provided by the Patent Office Translation Branch*), the engaging projections (17p) being engaged with engaging holes (15H) provided in the segments (15) and integrally formed as one unit, wherein

tip ends of cut-rising pieces (21) functioning to allow insertion of the engaging projections (17p) into the engaging holes (15H), but operative to prevent the engaging projections (17p) from being pulled out from the engaging holes (15H) are projected from peripheral edges of the engaging holes (15H), and

the cut-rising pieces (21) are brought into contact under pressure with peripheral faces of the engaging projections (17p).

Sugiyama discloses peripheral faces of tip end side engaging projections (17p) which have passed through the engaging holes (15H) provided in the segments (15) are formed into coarse faces (figure 7C) by the cut-rising pieces (21) provided on the peripheral edges of the engaging holes (15H). Sugiyama discloses conductive paste (*column 2, paragraph 3B according to a translation provided by the Patent Office Translation Branch*) is interposed between the segments (15) and the carbon (17).

Sugiyama discloses a plane carbon commutator comprising:

a plurality of metal segments (15) fixed to a commutator body (3) made of resin;
and

engaging projections (17p) provided on a carbon (17) which was previously burnt at a high temperature,

the engaging projections (17p) being engaged with engaging holes (15H) provided in the segments (15) and integrally formed as one unit, wherein

tip ends of cut-rising pieces (21) functioning to allow insertion of the engaging projections (17p) into the engaging holes (15H), but operative to prevent the engaging projections (17p) from being pulled out from the engaging holes (15H), are projected from peripheral edges of the engaging holes (15H), and

the tip ends of cut-rising pieces (21) are dimensioned to have a smaller diameter than the diameter of each engaging projection (17p), whereby

the cut-rising pieces (21) are brought into contact under pressure with peripheral faces of the engaging projections (17p), so that the cut-rising pieces (21) form coarse faces on the peripheral faces of the tip end side of the engaging projections (17p), the engaging projections (17p) pass through the engaging holes (15H).

However, Sugiyama does not disclose that the time at which the engaging projections pass through the engaging holes provided in the segments equals the time at which the peripheral faces of the tip end side of the engaging projections become coarse faces by the cut-rising pieces provided on the peripheral edges of the engaging holes. Sugiyama does not disclose that the cut-rising pieces form the coarse faces on the peripheral faces of the tip end side of the engaging projections as the engaging projections pass through the engaging holes.

The above manufacturing order is not disclosed, but the end product including the coarse faces is present in Sugiyama.

Referring to claims 1, 3, and 5, no patentable weight has been given to the method of manufacturing limitations (i. e. "*a time at which the engaging projections pass through the engaging holes provided in the segments equals a time at which the peripheral faces of the do end side of the engaging projections become coarse faces by the cut-rising pieces provided on the peripheral edges of the engaging holes*") since "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See also *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

Response to Arguments

Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Application/Control Number: 09/579,294
Art Unit: 2834

Page 6

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Perez whose telephone number is (703) 306-5443. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308 1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305 3432 for regular communications and (703) 305 3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.


KARL TAMAI
PRIMARY EXAMINER

Guillermo Perez
June 24, 2003